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"NEC TENUI PENNA."

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THE TWENTY-EIGHTH ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION AT CHICAGO.

We abstract the following from the very excellent report contained in the Boston Medical and Surgical Journal for June 14th:

TUESDAY, June 5, 1877.

Dr. J. Marion Sims, the retiring president, called the meeting to order, and then introduced the president, Dr. Bowditch. Dr. N. S. Davis delivered the address of welcome in his usual happy style.

The president then delivered the annual address, at the close of which it was ordered to be published.

THE SECTIONS.

Section 1—*Practical Medicine, Materia Medica, and Physiology.* Chairman, Dr. P. G. Robinson, of Missouri; Dr. B. A. Vaughan, of Mississippi, secretary.

The first subject before the assembly was the treatment of croupous pneumonia, by Dr. A. B. Palmer, of Michigan. The title of this paper was The Effects of Quinine in the Treatment of Pneumonia, and the antipyretic value of doses of from twenty to forty grains of the drug given within twenty-four hours, combined with a moderate dose of morphine, was well set forth. The next paper was entitled Effects of Remedies in Small Doses, by Dr. John Morris, of Maryland. The possible effect of very minute doses was discussed.

Section 2—*Obstetrics and Diseases of Women and Children.* Chairman, Dr. J. B. White, of New York; Dr. Battey, of Georgia, secretary.

The secretary read a paper, by Dr. W. H. Byrd, of Quincy, Ill., on The Surgical Treatment of Some of the Diseases of the Female Urethra; and it was discussed by Drs. Marcy, of Massachusetts, Smith, of Iowa, Jenks, of Michigan, Kendall, of Illinois, and Jackson, of Chicago.

Dr. Jenks, of Michigan, offered a resolution to the effect that a committee of three be appointed by the chair, to whom, with the chairman and secretary, all papers read should be referred, to decide as to the propriety of publishing them.

The resolution was adopted; and the chair appointed Drs. Jenks, of Michigan, Dean, of New York, and Marcy, of Massachusetts.

A paper upon Extirpation of the Uterus, by Dr. Gilman Kimball, of Massachusetts, was read by Dr. Martin, of Massachusetts; and a somewhat lengthy discussion was carried on relative to the subject by Drs. Reamey, of Cincinnati, Morris, Kimball, and Martin, of Massachusetts, Smith, of Iowa, Sims and White, of New York, Jennings, of Arkansas, Attlee, of Philadelphia, Byford, of Chicago, James Grant, of Ottawa, Can., and Mary Thomas, of Indiana.

Dr. Bozeman read a paper upon Vesico-vaginal Fistula.

Section 3, *Surgery and Anatomy*, was organized with Dr. F. H. Hamilton, of New York, as chairman, and Dr. John E. Owens as secretary.

The first paper read was by Dr. J. T. Hodgen, of Missouri, on The Value of Extension in the Treatment of Fracture of the Femur. In the paper the following propositions were set forth:

1. That in the treatment of fracture of the femur continuous and equable extension is indispensable to the best results is conclusively shown in the impossibility of maintaining with equal certainty accurate coaptation by any other means.

2. That continuous and equable extension can not be secured by lateral support.

3. That continuous and equable extension can be secured only by suspending the limb, because in no other way can we avoid friction between the extending force and the part to be extended.

4. That suspension furnishes the best means for allowing motion to other parts of the body, while perfect apposition of the fragments of fractured thigh is constantly maintained, because there is no resistance offered to the movement of the limb in any direction in which the body may be moved except in the direction from the point of suspension, and in every other direction the limb follows the movements of the body without the least friction.

In the discussion which ensued there was very great contrariety of opinion expressed and good deal of warmth manifested by some of the speakers.

Dr. Hingston offered the following resolution, which was adopted:

Resolved, That in fractures of the thigh, notwithstanding the judicious employment of every mechanical contrivance hitherto devised, shortening of the limb is of frequent occurrence.

Dr. Peck, of Iowa, then said that inasmuch as there was a slight misunderstanding on account of what was said last year regarding the treatment of fractures, he would offer the following resolution:

Resolved, That it is the opinion of this section that shortening in cases of fracture of long bones is the rule in practice regardless of any of the plans of treatment now in use.

A spirited discussion ensued upon the submission of the resolution. Some strongly advocated its adoption, while others as strongly objected to it. A motion was made to lay it upon the table, which very nearly had the desired result.

Dr. Hevans, of Missouri, did not think the passage of such a resolution advisable. He objected to any association voting upon a scientific subject.

On the other hand, Dr. Gunn, of Chicago, thought the resolution ought to be carried. He did not look upon the question as one of science, but one of fact. Shortening of a fracture was the rule, and full length the exception. This was the purport of the resolution, and he hoped it would be passed.

The resolution was finally adopted, and the paper referred to the Committee on Publication.

Section 4, *Medical Jurisprudence, Chemistry, and Psychology*, met, with Dr. Grissom, of North Carolina, as chairman.

The first essay read was by Dr. John P. Gray, of Utica, New York, on The Relations of Spiritualism to Medical Jurisprudence. He took as the foundation for his effort the Ward will case, and drew several conclusions from the facts, as follows: 1. Spiritualism must not be taken as evidence of insanity. 2. A belief in communications from the unseen world from supernatural messengers is not an insane delusion. 3. The belief that mediums can communicate with the dead is not an insane delusion, but no evidence has been as yet presented of the truth of such communications having been made; they are mere assertions of the so-called mediums. 4. The implication of fraud must stand against all such persons' communications, as the dead party can not be reached except through the so-called medium, and therefore the living party to whom the communication is made has no power of communicating with the dead; the whole is received simply through the medium. 5. Such communications can not be received in courts of law, as they are excluded by the rule of rejecting conversations not held in the presence of both parties. 6. If spiritualism is espoused as the result of the disease of the brain, being before repugnant to the belief and mental operations of the individual, then it is an insane delusion. Spiritualism must be regarded simply under such ruling of the court as undue influence. When it is a fraudulent influence, or conspiracy in the case of writs or contracts, then the writs and contracts made under such influence must be void. 7. The most serious questions would arise where a person should attempt to commit homicide under the direction of the so-called spirits. The presence of a medium in such a case would suggest fraud and conspiracy. If the individual were a spiritualist through life and before the time, no insane delusion can be claimed, unless it can be found in a brain disease. He would have to stand in that case upon the same platform as ordinary criminals. 8. Spiritualism can be considered only as an occasional delusion, and not as a cause or form of true aberration. It stands on the same footing as witchcraft, vampirism, etc. 9. The medico-legal bearing must be determined by the facts in such a case, whether it is an insane delusion or entertained simply as a speculative belief with reference to the unseen world. Medical science can take no cognizance of it as a speculation.

Section 5, *State Medicine and Public Hygiene*, met with Dr. E. M. Hunt, of New Jersey, in the chair. The principal feature of this committee's session was the reading of a very exhaustive and able paper on The Ætiology of Enteric Fever, by Dr. J. L. Cabell, of Virginia. The essay was very long, and treated of the conditions under which the fever is most readily developed. He had given the subject careful study, and his essay was illustrated by many interesting and valuable cases in the practice of medicine in his state. Dr. Cabell in his paper took the ground that the proof of indirect contagion is without a doubt. There are other causes for these fevers beside sewers and fæcal matter, and he cited many instances where the fever had broken out in the healthiest mountain regions, away from miasmatic influences. He takes the ground that it is a specific fever, and its origin is largely attributable to contact with the sick.

WEDNESDAY, June 6, 1877.

Dr. E. R. Squibb read a paper upon the Revision of the United States Pharmacopœia, in which he severely criticised the last edition of the United States Dispensatory. Many recent improvements and important discoveries are not noticed, and useless footnotes and explanations remain as they were in the former edition. Dr. Squibb's language was logical and convincing, and his address was received with favor; but he was of the opinion that nothing could be done this year in the way of preparing a new pharmacopœia.

There were also addresses by Dr. P. G. Robinson, of Missouri, on Practical Medicine, and by Dr. J. P. White, of Buffalo, on Obstetrics.

THE SECTIONS.

In Section 1 Dr. N. S. Davis read a report upon Clinical and Meteorological Records. His conclusion was that the bowel affections so characteristic of this temperate climate begin invariably with the first week of continuous high temperature, and each recurrence of an attack of bowel complaint is accompanied by continuous high temperature, but to produce disastrous effects the high temperature must immediately follow a season of cold. These conclusions Dr. Davis corroborated by citations from mortality tables.

Dr. Charles Dennison, of Colorado, read a paper on Cases showing the Influence of Colorado Climate upon Consumption, the paper being supplemental to one read in 1876. Dr. Dennison was a warm advocate of Colorado air as a specific for consumption, and presented many tables of statistics relative to the subject. He gave detailed accounts of twelve phthisical cases, of which half were favorable and half unfavorable to the Colorado climate. He had been led to the conclusion that consumption might be benefited by the Colorado atmosphere not only in its early but, under proper conditions, in its later stages. The influence of altitude upon phthisis was favorable in the beginning of chronic inflammatory and hemorrhagic cases, and in cases allied to these. It was unfavorable if the disease were characterized by cardiac disease, associated with increased labor and abnormal activity, with nervousness and want of courage. The paper gave rise to a warm debate.

Section 2 met with Dr. J. P. White, of Buffalo, in the chair.

Dr. Marcy, of Massachusetts, read an essay upon Congenital Absence and Imperfect Development of the Uterus.

Section 3, *Surgery and Anatomy*, met in Farwell Hall, the attendance at this section being greater than that at all the other sections combined.

Dr. Gross read a paper prepared by his son, Dr. S. W. Gross, of Pennsylvania, upon Stricture of the Urethra from Masturbation, and its Pathological Significance.

Dr. W. T. Briggs, of Tennessee, read a paper on Medio-bilateral Lithotomy, which was discussed by Dr. J. T. Hodgen, of Missouri, and Prof. Langford and Dr. Gouley, of New York.

Dr. Lewis A. Sayre described his Treatment of Fractured Ribs by Extension and Expansion of the Thorax and Retention by Plaster-of-Paris Bandages.

Dr. Whipple, of New Jersey, described an operation of his in which he removed one inch and a half of the tibia and fibula of a patient. In the discussion of this case Dr. Link, of Indianapolis, described cases in his practice showing that the repair of a bone did not depend on the existence of periosteum.

Section 4, *Medical Jurisprudence, Chemistry, and Psychology*, listened to and discussed a paper by Dr. R. J. Patterson, of Illinois, on the subject, Do Facts justify the Recognition of Moral Insanity as a Distinct Form of Mental Disease?

Dr. Patterson's conclusions were adverse to such recognition. His paper contained statistics from a large number of insane asylums, running back over several years, and showing a very marked diminution of cases of so-called "moral insanity." This proved either that the disease was becoming less frequent, or that the doctors were losing their belief in the existence of such disease and attributed the cases to other diseases. Dr. Patterson objected to the recognition of moral insanity as a distinct form of mental disease, because there were no cases in which it was shown that a person suffered from "moral insanity" while the intellect was perfectly rational. No person would suffer by the denial of this recognition. The term "moral insanity" not only does no good, but it does positive harm by enabling unscrupulous lawyers to set up a specious plea in behalf of their clients, especially in cases of homicide, in which there is no question as to the soundness of the intellect. The cases of Sickles, McFarland, and many others were cited here. And finally, very few of the highest authorities, medical or legal, recognized such a disease as moral insanity, and the plea of that disease is looked on with suspicion by experts.

Dr. John P. Gray, superintendent of the New York State Lunatic Asylum, said the institution he had charge of had been cited by Dr. Patterson as refusing to recognize moral insanity. That was true so far as he was concerned, but his predecessor, Dr. Brigham, believed in it, and according to the asylum's records there had been two thousand cases of moral insanity in that asylum alone. He, Dr. Gray, had examined ten thousand cases of insanity without finding one that he regarded as a case of moral insanity. Dr. Brigham made three or four classes of moral insanity. One class was the impulsive, that characterized by a single manifestation, such as an impulse to commit homicide, with no other deviation from health. Dr. Gray did not believe such a case ever existed, but Dr. Brigham did. Dr. Gray would as soon think of impulsive diarrhœa as of impulsive insanity. The idea of a disease that comes in a moment and goes in a moment conflicted with all his ideas of physiology and psychology. One of the asylums Dr. Patterson cited, that at Longwood, reported in one year a phenomenal amount of "moral insanity." Probably "rum" would expresss all of it.

In a monograph by Despine, read a few years ago before the Academy at Paris, and for which a prize was awarded, the author pronounced all insanity as deep, ingrained immorality, ingrained by the patient

himself, and held that insanity is not a sickness at all, but a disease of the soul.

Dr. Ray, the chief believer in "moral insanity," does not give the clinical history of a single case that occurred under his own observation at the Butler Asylum, Providence. Moral aberration was a matter of degree. There are persons who have a considerable amount of mental shrewdness, and yet whose moral nature is so perverted that they do not know right from wrong. The law puts such people into prison.

Referring to the subject of heredity, Dr. Gray said that persons who suffered from moral taint transmitted by parents might be held to be morally defective, but it was unjust to them and to the profession to regard them as diseased. The soul, he said, might be tarnished, but it could not be diseased, for what might be diseased would die.

Dr. Thompson, of Mississippi, made the point that moral insanity was believed in formerly more than it is now.

Dr. Battey, of Georgia, said that in the asylums under his charge, where there were twelve hundred patients, there had during twenty-one years been no case regarded as moral insanity.

Dr. Knight said that if the term "moral insanity" implied the perfect soundness of all faculties except the moral faculties, there was no such thing.

In reformatories there were, he said, perfectly healthy boys who would rather do wrong than do right. Punishment they seek to evade, but if it is applied it does no good. They sleep well and eat well, and their minds seem bright enough. It is doubtful if these persons were morally responsible.

Dr. Seguin, of New York, believed in moral insanity. In idiot asylums children were received who were worse than idiots. They had an inevitable habit, a necessary impulse to sin. They had no symptoms of idiocy. They were healthy in body and bright in mind. He told of a boy who had on twenty occasions shut himself up in a room and set fire to the furniture. He knew that he was doing wrong, but he had a necessary impulse to do it. The boy has been cured, and is now a perfectly good boy.

The origin of moral insanity among children was a want or, better, a need. This boy had a need to see bright things as some people have to speak constantly. This boy's insanity was a sort of sensory insanity.

Dr. Buck, of Canada, also believed in moral insanity. Two patients in his asylum were conspicuous examples of it. He had failed to detect in either any intellectual delusion, but their moral natures were so perverted that they could not live in society. One of these cases was a woman who was clever, neat, ntelligent, and in perfect health, but she was subject to violent attacks of passion, and had excessively erratic tendencies. The other case was a man. His mind was sound enough so that he had accumulated a fortune, and he was perfectly healthy; but if at large would maltreat his family, and commit other acts, making his existence in society impossible. Dr. Buck believed there were many other cases in his asylum where the initial departure from health was in the emotional nature. A very marked departure of the emotional involves the intellectual nature. He held that a moderate, moral aberration constituted criminality, while excessive aberration constituted moral insanity. The intellectual nature affects the emotional nature but slowly, while the emotional nature has immediate and tyrannical power over the intellectual nature.

Dr. E. M. Hunt, of New Jersey, presided over Section 5.

Section 5—*State Medicine and Public Hygiene* was the topic under discussion, and the first paper read was by Dr. J. R. Black, of Ohio, the title of whose essay was the Relation of Heredity to Race Degeneration and Improvement. The author concluded that the more the race tended toward the primitive types, the better for the health of the people, because, in those times, when all were exposed to hardships and rough living, the sword of privation fell fatally on those who were weakly and undeveloped. If people afflicted with hereditary disease would refrain from perpetuating their species, the human race would soon become perfect as of old, but, unfortunately, the congenital desire was too strongly implanted in human nature to make such self-sacrifice possible. But, even with this drawback, by attention to the principles of health, by avoiding marriages with blood relatives. and by living temperately and decently, the degeneration now so marked in our population would be, if not entirely obliterated, at least checked in a gratifying and promising degree.

Dr. Comegys read a paper upon State Medicine, which particularly dwelt upon the necessity of rigid legal restrictions as regarded admission to practice. The state should exercise over all physicians a supervision so careful that no unqualified person could by any possibility foist himself upon the community. In pursuing his subject he remarked that gentlemen following the profession of medicine were, like clergymen, virtually debarred from the field of politics, which he did not consider an unmixed evil, by any means.

THURSDAY, June 7, 1877.

The secretary, Dr. Atkinson, read the following report from the treasurer, Dr. Wistar:

"The treasurer has the honor to report that under positive instructions of the Association the prize essay has been published at a cost of some six thousand dollars. This unusual outlay, in addition to the unusual volume of the Transactions, leaves the treasury

in an exhausted condition, as it has practically given to each member nine dollars in value for five dollars received.

"In this his last report, after twenty-two years of service, it remains for the treasurer to thank the Association for its long-continued confidence, and to regret that in leaving the treasury solvent he can not leave a more abundant surplus. The amount in the treasury is now $172.72."

Dr. N. S. Davis reported that but two prize essays had been presented, one of which was unworthy and the other came too late to be examined. It was voted that no prize be given.

Dr. Ezra M. Hunt read an address on Hygiene and State Medicine.

Dr. Squibb resumed his speech of the preceding day on the Pharmacopœia. He closed by stating that there were three courses for the association to pursue: First, to lay the whole matter on the table, leaving it exactly as it was, on the ground that the association was not necessarily involed in revising the Pharmacopœia at all; second, the association might make a Pharmacopœia such as it saw fit, allowing it to take its chances with others. He thought this latter plan would not create a Pharmacopœia which would be accepted by the army and navy. The third was for the association to appoint a committee to consider the matter in detail, and report in 1878, on which occasion all the state societies should send their delegates thoroughly instructed as to their ideas on the subject.

Dr. H. C. Wood, of Philadelphia, expressed himself strongly against the revision of the Pharmacopœia. The fault lay not in the book, but in those who neglected their duty by failing to attend conventions, and neglecting other modes of improving themselves, and the world also. He expressed himself deeply grieved that the discussion of the subject had been the means of kindling ill feeling between certain members of the association.

Dr. Brodie moved to refer the whole matter to a committee of five.

Dr. N. S. Davis then took the floor, and made a speech in which he protested against the dragging in of this matter of discord, and warmly indorsed the remarks of Dr. Wood. In his opinion such discuscussions tended to disruption and demoralization, and he hoped the association had heard the last of them. [Applause.] The only duty the association had to perform in the premises was to consider a new Pharmacopœia, and to suggest improvements which would benefit the profession. Members should be imbued with that idea. It was a feeling that would be of gradual growth, and there was no real use of forcing the question upon the association just then. He moved that the matter be indefinitely postponed. Motion was carried amid loud applause.

The committee on nominations reported, for president, T. G. Richardson, of Louisiana; vice-presidents, J. P. White, New York, Moses Gunn, Illinois, G. W. Russell, Connecticut, A. Dunlap, Ohio.

THE SECTIONS.

Section 1. Dr. H. A. Martin read a report upon Bovine Vaccination. He thought state governments ought to keep stables for the production of the bovine matter. He had for several years maintained such an establishment without profit. He wished to create no sensation, but it was a fact that syphilis had been sometimes transmitted by humanized virus. The bovine matter insures absolute purity. He had known persons vaccinated with the humanized matter to have the small-pox, but he never had known of a person who was vaccinated or revaccinated with bovine matter to have the small-pox.

The paper was referred to a special committee to report to the committee on publication.

Section. 3. Dr. Gross read a paper on pain. In the discussion which followed, the writer stated that the nervous fluid is precisely similar to, if not positively identical, with the electric or galvanic fluid, modified by the play of the vital actions which everywhere exist in the organs and tissues through which the nervous fluid circulates; that the fluid under consideration is generated by the brain, spinal cord, and nervous ganglia, and that the nerves are simply passive cords, ropes, or, so to speak, wires for the transmission of the nervous fluid; that pain is due immediately and directly to obstruction to the transmission of the nervous current, thus causing an accumulation of nervous fluid at the seat of the obstruction.

Dr. Marcy, of Cambridge, Mass., read a paper on the subject of bandages.

Dr. Sayre exhibited a case illustrating reflex incoördination from genital irritation, the illustration being an idiotic little girl about twelve years of age, and described his mode of treatment in such cases.

Dr. S. J. Jones read a paper on Recent Advances in Otology, and was followed by Dr. Andrews, who gave an abstract of a paper going to show that incisions can be rendered painless by high velocities, illustrating his idea by a peculiar incisor of his own contrivance.

Section 5. Dr. Elisha Harris read a paper on the Results of State Legislation on Public Health.

FRIDAY, June 8, 1877.

Dr. Singleton, of Kentucky, offered resolutions, to the effect that the tariff on quinine should be abolished. Adopted.

After the usual votes of thanks, and some remarks by the retiring president, Dr. Richardson, president elect, was introduced, and made a feeling address.

When the association adjourned to meet at Buffalo, N. Y., on the first Tuesday of June, next year.

Original.

RELATIONS OF THE MEDICAL PROFESSION TO LIFE INSURANCE.

BY J. B. TEMPLE,

President of the Southern Mutual Life Insurance Company of Kentucky.

In a former number it was remarked, in reference to medical examiners in life insurance, that "it would seem to be worth while that professional men undertaking a duty so delicate should inform themselves of the fundamental principles of a business like life insurance, so that their portion of the work would be up to its requirements." . . "Some one well informed, who would make a clear and simple statement of these underlying principles suited for the non-professional student, and in such brief form as to be soon studied, would render a valuable service." It may be stated with great propriety that such service had already been rendered in about fifty octavo pages of Notes on Life Insurance, by Gustavus W. Smith, late the insurance commissioner of Kentucky, in such clear and simple form as to be easily understood by any one having a moderate knowledge of common arithmetic. These pages treat of the theory, while for practice more complete methods are developed requiring higher mathematical attainments.

Since the last article on this subject a medical friend has shown me a lecture of a distinguished medical professor, in which the lecturer shows a high appreciation of his subject and of the point now to be elucidated, but makes a statement of principles not calculated to avoid misapprehension. He says: "In life insurance examinations you are to judge of the probabilities as to whether the man is likely to have the *average duration* of human life." A rule is here applied to the individual which is only correct when applied to classes. To secure average duration in a class, each member of it must have a fair prospect that he may live to the limit of human life.

Let the fundamental principle and its importance be elucidated by a parallel case.

If application were made to a mathematician to calculate the sum of money which, being increased at the rate of six per cent per annum, will pay $10,000 at the end of ten years, by a very simple process he will tell you that $6,139.13 will do it. But if it should turn out that, instead of the maturity of the whole sum at the end of ten years, $1,000 will fall due and must be paid at the end of each of the ten years, it will be found that when only the eighth payment matures the fund will be exhausted and fall short of completing that payment, leaving nothing for those not yet due. If these terms are multiplied by ten, and thereby the time increased to one hundred years, and the amounts in the same ratio, the results will be the same. Another element, it seems, enters into the calculation, and the difference caused by the earlier maturities of parts of the principal sum must be determined; a thing not difficult to be done, but highly important in the changed state of case. The fault lies not in the calculator, but in the statement of the case to be computed. Accuracy in this regard is of the first importance in matter of contract.

Now let it be seen how this applies to life insurance.

What are called mortality tables are made from observations upon a large number of lives; and while it is found that in rare cases life is prolonged beyond one hundred years, it is safe to fix that age as the extreme limit of human life. If there be taken one thousand persons of ages from twenty up to sixty years, it would be a very simple thing to compute what sum of money in hand or in stated installments would produce in each case another given sum—say $1,000 at the limit of life. It is the same calculation made in the illustration where $10,000 was to be paid at the end of ten years; but no element of insurance has yet entered into the computation. It is well understood that very few will reach the limit of life, and that a large number will die at each intermediate

age; and as these mortality tables enable the mathematician to know what proportion will die at each age of such as attain to it, the computation to provide for the difference in the payments caused by these earlier deaths is the element of insurance entering in, and is similar to the illustration used in which $1,000 of the $10,000 to be paid in ten years matures each year.

In this statement of the matter the great importance of accuracy in the statement of the case is made entirely manifest.

These mortality tables have been constructed on two sets of observations; one upon the whole population of a country, district, or city, the other upon lives insured in various companies. It might reasonably be inferred that the observations upon insured lives, with careful medical examinations such as I have advocated, would show a more favorable result in longer lives than those upon the whole population; but the difference is less than might be supposed, if indeed the difference is not against the insured class, and from obvious causes the advantages seem to have grown less.

The reasons for these unexpected conditions were given in sundry extracts from the reports of the registrar-general of England, in the first of this series of articles, "that those persons will be most for flying to these establishments (insurance offices) who have feeble constitutions or are subject to distempers which they know render their lives particularly precarious."

Upon this statement it was remarked that "It should not be set down that the disposition to seek the protection of an insurance office by those of feeble constitutions is the prompting of dishonesty in every case. Nature is a powerful and watchful monitor, and her monitions often precede the actual presence of the danger to be guarded against." Nevertheless, if there be no precautions against these tendencies, their influence must be unfavorable. Even then the common destiny of man, to the grave, leaves sufficient inducement to seek protection against its untimely coming.

It will surely need no further reasoning to show how beneficial some acquaintance with the underlying principles of life insurance will be to the medical man, to enable him to perform his duties so that no hurtful error may be committed that may accelerate the maturity of policy claims, and render insufficient the provision for their payment, as in case of debt becoming unexpectedly due.

Enough has been said to show that these policy obligations must necessarily mature in an increasing ratio, and to understand the principles upon which the business rests is to forewarn against the delusion of present experience. The calculations must extend far ahead, with a full knowledge that there are breakers before us however unruffled the seas which now are being explored.

A fact, which actually occurred in this city, will illustrate. A man, who attends regularly to his daily business, and in external appearance would pass with the ordinary observer as a man of usual health, has been twice rejected by that class of insurance companies conducted by men who study principles as the doctors study medicine, to know its foundations and understand its practice. This man has been twice accepted by a class who, like the quack in medicine, ignores science and relies upon human credulity; that class which our legislature, with more truth than wisdom, has declared *not* to be insurance companies, but which yet pretend to *insure* lives.

It is not necessary to assume that improper motives have actuated this diversity of conduct. Persons afflicted as this man, with atrophy of the heart, have lived longer and paid in more premiums than some others who were, as far as human skill could detect, free from disease; but the chances would be terribly against the insurer, and that must be understood in order not to be misled. An insurance company, while growing in assets, may be laying the foundation of insolvency. It would not even require medical skill to make such selections as would lessen the ratio of losses in the first year;

but if that skill is not called into requisition faithfully, the descent in the scale will inevitably be in a ruinous degree. If the skill is not intelligently applied, the consequences may be equally fatal, though long after the doctor has paid the debt of nature; or, if living, without understanding of the principles in the application of which he is an important factor, he may never apprehend the extent to which he may have caused the mischief.

It has already been shown how that in spite of care and skill the ratio of mortality among insured lives is not better than that of the general population. Skill has a strong force to contend with, and vigilant fidelity can alone secure it the victory.

LOUISVILLE.

A CASE OF SUPPOSED CINCHONISM.

BY WM. B. MEANY, M. D.,
Ass't Surgeon to the Louisville Eye and Ear Infirmary, etc.

I was requested by the family physician to visit Mrs. M., aged fifty years, on account of a tinnitus, with impairment of hearing. The physician to whose courtesy I am indebted for this case thought that the tinnitus was due to quinia. He had stopped the administration of quinia and substituted other antiperiodics. By rhinoscopic examination I found the naso-pharyngeal space blocked up with a muco-purulent secretion, showing that catarrhal inflammation had existed for a long time. The tonsils were hypertrophied and covered with muco-purulent material, which extended to the faucial orifices of the eustachian tubes, and prevented the ingress of air to the middle-ear. Otoscopic examination revealed hypertrophy of the drum membrane; the drum-head was perceptibly depressed. By cleansing the naso-pharyngeal space and inflating the middle-ear, the tinnitus ceased, and the hearing at once improved.

I suggested at this point, as the patient was suffering with malarial complications, that a twenty-grain dose of quinia be administered at bed-time. The quinia produced a slight ringing sensation, which entirely ceased by morning.

Here was a case attributed to the effects of quinine, when the patient was gradually becoming deaf from an inflammation of the naso-pharyngeal space, which by closure of the eustachian orifices prevented the requisite supply of air from reaching the drum cavity. Quinia no doubt produces this temporary condition known as tinnitus aurium, but it rarely if *ever* lasts more than a few hours.

By continuing the treatment already mentioned the patient gradually recovered.

LOUISVILLE.

Reviews.

Report on Dermatology. By LUNSFORD P. YANDELL, JR., M. D., Professor of Therapeutics and Clinical Medicine in the University of Louisville. Read before the Kentucky State Medical Society. Reprint from American Practitioner.

The Report on Dermatology contains an account of the important features of Syphilis, Scarlatina, Measles, Variola, and Varicella, the main portion of it being devoted to the first named disease. The high standing of the author in the special field of which the paper treats gives to it a peculiar value, and independent of this it is an excellent paper. Prof. Yandell gives the following derivation of the word syphilis:

"The origin of the word syphilis is an unsettled question, and I venture to offer a theory on the subject which seems to me more probable than any hitherto suggested. 'The town disease,' 'the town disorder,' are terms used by the lower classes, and especially among the rustics, to indicate this affection. Syphilis, from our first knowledge of it, has been eminently a city disease. The Latin word *civilis* signifies pertaining to a city or to citizens; and it occurs to me that *morbus civilis, i. e.* citizens' disease or city disease, was probably the first popular name for syphilis. Furthermore, it is perfectly natural, and in accordance with popular custom, that, for the sake of brevity, the word *morbus* should have been dropped, leaving only *civilis*. The alteration in the spelling of the word is not remarkable. Chancre was once spelled shanker, etc."

Upon the prognosis of syphilis he has the following cheerful words:

"There is a widely prevalent popular belief that syphilis is never entirely cured, and not a few physicians entertain this opinion. My belief is that syphilis is one of the positively curable diseases, and I know of no malady the symptoms of which yield more kindly and certainly to proper treatment. Indeed, I believe that bad treatment, and exaggeration of statement, are largely responsible for the fearful reputation this disease has acquired for violence, malignity, and obstinacy. At the same time I must admit that, in extremely rare instances, cases may be encountered which defy all treatment."

Miscellany.

In the address of Dr. Bowditch before the American Medical Association, as published in the Boston Medical Journal, mention is made of our great first ovariotomist *Caldwell*. Here 's a go—the president of the Association on one side and the Riverside Press on the other. If they say it was "the printer," Kentucky demands that his head shall be sent to us packed in the original sawdust in which it fell.

A new method of cleaning the skeletons of small animals, by utilizing the enormous appetites of tadpoles, is described in the English Mechanic. M. Lareste, the discoverer, has found that the tadpoles may be quickly habituated to a meat-diet, and that they rapidly denude the bones, when the carcass, previously skinned, is presented to them in water, kept in a warm and somewhat darkened place.

Our Charities.—Kentucky Infirmary for Women and Children.—At a meeting of the Board of Regents, Kentucky Infirmary for Women and Children, held May 15, 1877, the following persons were elected to serve for the ensuing year:

Board of Lady Visitors.—Mrs. S. J. Look, president; Mrs. John M. Harlan, vice-president; Mrs. J. Jones, secretary and treasurer; Mrs. George W. Griffiths, Miss H. Quigley, Miss M. Lafon, Mrs. Gertrude Avery, Mrs. William A. Warner, Mrs. Bettie Finley, Mrs. S. W. Wilson, Mrs. A. A. Wheeler, Mrs. C. A. Lehman, Mrs. B. F. Avery, Mrs. K. W. Smith, Miss Alice Short, Mrs. Patrick Pope, Mrs. T. G. Alexander, Mrs. Eva Beach, Miss Sophia Fischer, Mrs. Grandison Spratt, Mrs. T. P. White, Mrs. Wood, Mrs. Samuel Brandeis, Mrs. Fink, Mrs. Andrew Cowan, Mrs. J. F. Atwood, Mrs. S. C. Haggin, Mrs. Louisa Summers; Mrs. Lawrence Richardson.

Medical Staff.—Dr. David Cummins, deformities and general surgery; Dr. Geo. W. Griffiths, diseases peculiar to women and children; Dr. R. C. Brandeis, diseases of eye, ear, and throat; Dr. Ely McClellan, pelvic surgery; Dr. Samuel Brandeis, surgeon accoucheur; Dr. James McEvoy, clinical assistant.

Dental Staff.—B. Oscar Doyle, D. D. S.; W. T. Redman, D. D. S., M. D.; Ch. E. Dunn, D. D. S.; W. T. Goddard, D. D. S.; C. G. Edwards, D. D. S.

Additional Honorary Members, Board of Regents.—Prof. W. H. Byford, Chicago, Ill.; Dr. Washington Atlee, Philadelphia; Dr. J. Marion Sims, New York.

The Board of Regents, in re-electing on the medical staff the gentlemen named above, feel it to be a pleasure and a duty to state that the record of their attendance, which is daily kept, shows that they have been conscientiously punctual to their appointments during the whole year, and have administered relief to a large number of afflicted women and children, who but for them would have continued to suffer. The board also takes pleasure in referring to the faithfulness of the lady visitors, who have at great expense of time and strength visited the infirmary daily, managing the domestic arrangements, and caring for the well-being of the patients.

J. Jones, *Sec'y.* B. F. Avery, *Pres't.*

Anatomy.—Dr. McMurtry, of Danville (Am. Med. Bi-weekly), in a Report on the Progress of Anatomy and Surgery before the Central Kentucky Medical Association, makes the following graceful remarks:

"Anatomy deals in certainties, and involves no theories or speculations as do the other branches of our science. Human anatomy is a complete and worked-out science; and while from time to time the fasciæ have been split up into cobwebs, and described as thus unraveled by skillful dissectors, and a few muscular fibers or an-

omalies are discovered by others, yet it is conceded by the most thorough anatomists of the day that our best works on anatomy have been classic for several generations. The plates in the great work of Vesalius are as admirable for their accuracy as for their artistic design; and the magnificent work of Albinus on the muscles, published in 1747, is supreme authority in that department at the present day.

"It is only minute anatomy (histology, the progress in which keeps pace with the improvement in instruments and in the method of preparing tissues) which has advanced beyond the point at which Hunter and the anatomists down to his day left it. In this respect anatomy differs from all the other sciences which demand our attention, for they continue to advance with rapid step. That anatomy does so differ from the other branches of medical science is a fact suggestive of the highest gratification, since it is the groundwork of all our knowledge. If a single one of the important anatomical facts were proved erroneous, it would necessitate a change running through the whole system of medicine and surgery. Even further, if there were the possibility of error or mistake in any of the recognized facts of anatomical science, it would render the study of the medical sciences hopeless."

INDIGESTIBLE SUBSTANCES.—The question "How does desiccation convert steamed grains into a wood-like substance?" propounded in the Times, by the manufacturers of steam cereals, is easily answered. The gluten, softened by steam, is "fixed" or permanently solidified by drying, and is forever afterward insoluble and indigestible. The same effect is produced upon animal albumen, a kindred substance, and upon gelatine. Modern chemistry teaches all this, and the experiment is easily tried. The richer the grain treated is in gluten, the more completely insoluble it is rendered. Thus wheat, steamed and dried, is nearly ruined in aroma, flavor, and assimilable nutriment, while oats are less seriously impaired, though rendered insipid and tasteless. The theory that the cereal grains can be in any way improved or their nutritive elements added to by steaming and subsequent drying, is something more serious than a fallacy, since it may induce ignorant persons to employ them as foods, and to suffer by their use.—*The Physician.*

MESSRS. R. A. ROBINSON & Co., wholesale druggists of this city, have within the past few months engaged in the manufacture of fluid extracts and other pharmaceutical preparations. Their laboratory is a very extensive one, and they have placed it in charge of Mr. J. S. Connor, a graduate of the Philadelphia College of Pharmacy, and of thorough experience in his profession. The city of Louisville has for a great number of years been very prominent for the sale of drugs, competing successfully in this line with other cities in the South and West, even though of larger growth. We are glad to announce the extension of home enterprise in the manufacture of the preparations of the pharmacopœia on a large scale. We can safely declare that the products of the Messrs. Robinsons' laboratory will have all the guarantee for correctness that capital, intelligence, and probity can give.

Selections.

Phosphorus Assimilation.—R. W. Gardner, of New York, pharmaceutical chemist (New York Med. Record), says:

"When phosphorus is administered in a free state its irritant action forms the greatest objection to its use, and limits the quantity which may be given with safety. It is also necessary to give it upon a full stomach, as otherwise it attacks mucous surfaces and produces an irritation the extent of which depends upon the amount administered or the length of time the remedy is continued. The largest dose usually given is about the twentieth of a grain, though some practitioners frequently exhibit one twelfth, but not until the tolerating power of the patient has been carefully tested by a gradually increasing dose until this quantity is reached. Given in doses of from one hundredth to one thirtieth of a grain, it frequently

produces dyspeptic symptoms, when, if not at once discontinued, gastric trouble is apt to follow.

"Let us consider the cause of this irritant action.

"The affinity of phosphorus for oxygen is so great that it must be kept under water, for when exposed to atmospheric air the oxidizing process proceeds so rapidly that it spontaneously inflames. This explains its corrosive action in the stomach, modified no doubt by its surroundings, but nevertheless capable of producing the most serious results upon the delicate mucous surfaces directly exposed to its action.

"Phosphorus can not be absorbed in its pure state. A certain degree of oxidation must have taken place before it reaches a condition for assimilation. Exactly what this degree is has not been definitely determined; it is certainly not more than one atom, and possibly less. When it has thus become partially oxidized, however, it has lost its corrosive action; probably because it has become chemically combined with some base derived from the contents of the stomach, by which means the violent action is arrested; and it then, and not until then, is in a condition to fulfill its valuable agency by its contribution to nerve power and vital force. The remedial action of phosphorus is doubtless exerted from the time it has become thus suited for assimilation, during the whole of its subsequent oxidation, till it has finally absorbed all the oxygen capable of combination (three atoms), and is converted into a phosphate, when it ceases.

"The reasons for this conclusion may be found in the fact that the phosphorus eliminations from the body are invariably in a state of phosphate, and also that the chemical character of the phosphates is so firm as to be unaffected by hydrochloric and other acids, and are reduced with such difficulty as to lead unerringly to the conclusion that they are the least available of phosphorus compounds for the assimilation of the element. To use a simile, the phosphorus has become 'burned up,' the phosphate resembling the ash, and, having passed the period of its usefulness, is eliminated. Phosphorus exists in the vegetable world in the condition of phosphate only, in animal tissue, in fish, etc., in a partially oxidized state; constantly, however, undergoing the oxidizing process, and finally being thrown off after being fully utilized (oxidized) as effete matter. This at least partly explains the superiority of animal food over vegetable in imparting vitality and nerve force.

"It is rarely the case that animal organisms appropriate elements directly by natural process. The elements contained in food are in a condition of chemical combination, and by a reciprocal action nature relinquishes such substances as are useless or exhausted, and appropriates such as she requires; the first forming combinations designed for elimination, the second forming combinations for assimilation. These views naturally lead to the conclusion that while phosphorus should not be given unoxidized, or in its pure state, it ought also not to be used when fully oxidized, as found in the phosphate, or its acid the phosphoric, but that the most desirable condition is when it has reached its first degree of oxidation. But phosphorus passes directly to its highest condition of oxidation, unless combined with some base, in which case the oxidizing process is stayed; and it may be rendered not only available for therapeutic action, but also in a condition which conforms to the state from which nature is in the habit of choosing her food or requisites (*i. e.* combinations).

"The phosphide of zinc has been suggested and used to some extent, but does not seem a sufficiently definite compound, inasmuch as it produces irritant action and unpleasant effects.

"In the search for the most suitable compounds, there are none which answer the purpose so well as the several hypophosphites. They embrace quite a number of salts, the most prominent of which are those of lime, soda, iron, potassa, manganese, and quinia. The hypophosphites, while entirely non-irritant, and held by such a feeble affinity as to be readily decomposed in the stomach, not only contain oxygen in its least combining proportion, but represent a larger proportion of phosphorus relatively than any of its other compounds. It is found, however, that the therapeutic action of these salts is much modified by the impurities always found in the commercial hypophosphites and their preparations.

"It is very desirable that they be administered in a perfectly pure and neutral state; and unless they have been given in this condition their medical value has not been properly tested. This is proven by the superior results attained by the use of such salts at the European hospitals. The salts should be converted into solutions, the impurities removed by proper chemical treatment, and such solutions preserved against putrefaction and atmospheric influence by conversion into syrups; sugar being the best preservative agent, as it does not cause decomposition, and excludes atmospheric air. In this condition the salts have been found much more prompt and effective. Syrups thus prepared should be almost wholly devoid of medicinal taste, except in the case of iron, and in this the ferruginous taste is only mildly perceptible. The syrups of lime, of soda, and of potassa should be entirely free from the alkaline taste common to these preparations, and should never let fall a precipitate, which indicates, where it occurs, impurity."

On Defects in the Domestic Measurement of Doses.—Dr. Robt. Farquharson, Lecturer on Materia Medica at St. Mary's Hospital Medical School, writes as follows to the British Medical Journal of February 26th:

"The scrupulous accuracy with which prescriptions are made up by the highly educated dispensers who are now intrusted with this duty perhaps tends to make practitioners careless regarding the exact mode of administration of their drugs. For convenience in out-patient departments, the time-honored teaspoon or tablespoon is invariably recommended for the division of doses; and we console ourselves for our want of scientific precision by the belief that these domestic measurements usually correspond to certain definite standards laid down in our text-books. Sometimes, however, we find complaints that our medicine will not last out the week; and on inquiry we find that the patients have consumed nearly double the proper quantity during that time, although they have conscientiously endeavored not to exceed the regulated number of tablespoonfuls. This happens so often, and is productive of so much waste and annoyance, that I have lately, with the kind assistance of Mr. Marriott, dispenser to the Western General Dispensary, made a careful inquiry into the capacity of our common domestic measures with the following results:

"I will first consider drops, which are in occasional use, and which are held in a vague way to be about equal to a minim, although the more educated student of pharmacy would probably tells us that, on an average, they are only equal to half that quantity. Of

	Drops.		Minims.
Distilled water	56	represent	60
Tinctura opii	113	"	60
Tinctura digitalis	114	"	60
Liquor morphiæ hydrochlor.	100	"	60
Oxymel scillæ	80	"	60
Syrupus papaveris	75	"	60
Spiritus ætheris nitrosi	114	"	60
Tinctura camphore comp	112	"	60
Acidum sulphuricum dilutum	55	"	60
Spiritus terebinthinæ	110	"	60

"The next point is to inquire in how far the size of the drop is influenced by the shape of the bottle in which the fluid is contained. The experiments just noted were all made by means of an ordinary beaked mimim-measure, and I found barely a shade of difference between this and a small phial bought by a dispensary patient. But, on making comparative observations with tinctura opii, I obtained the following variations from my original estimate of 113 drops to 60 minims. Out of the ordinary surgery bottle I obtained 83 to 60 minims, and from a large twelve-ounce bottle in the possession of a patient 93 drops became the equivalent; and although these differences are considerable enough in themselves, the bottles in ordinary use differ but little from one another, and it will therefore be seen that the quality of the fluid is the main factor in regulating the relative size of the drops.

"But drops, after all, are comparatively seldom used, and the universal engine for the division of doses is the tablespoon, which homely implement is always at hand, and is held to represent a certain fixed quantity. In a series of seven, selected at random, and apparently differing very widely in shape and size, I discovered the following remarkable variations: No. 1 contained six drachms; No. 2, six drachms; No. 3, eight drachms; No. 4, eight drachms; No. 5, eight drachms; No. 6, five and a half drachms; No. 7, five drachms.

"It was found that a difference of from one to two drachms is made by the spoon being only moderately or completely filled; and of any oily fluid at least an additional drachm can be readily added. The result, therefore, that even the smallest tablespoonful does not hold less than five drachms, and that the largest contains at least an ounce, must completely alter our notions of prescribing; for we can surely no longer pin our faith to the regulation quantity of half an ounce, which this domestic measure is usually believed to contain. The dessertspoon was found to be equal to from four to six drachms; while four specimens of teaspoons were found to contain respectively eighty minims, ninety minims, and two drachms. The wine-glass must complete the series; and, in four experiments, No. 1 was found to hold three ounces and two drachms; No. 2, two ounces and six drachms; No. 3, three ounces; No. 4, two ounces and a half; and No. 5, two ounces and two drachms, thus exceeding pretty considerably in every case the regulation quantity of two ounces. So much then for the safety and accuracy of the modes of measurement most commonly employed.

"It would clearly be difficult, if not impossible, to expect any reform in this direction to come from the overcrowded hospital out-patient rooms; but it is not too much to insist that, in the wards and in private practice, graduated measures should invariably be used as a matter of routine. We shall thus secure not only greater safety in dealing with poisonous drugs, but greater scientific accuracy in any therapeutical observations we may wish to make upon our patients. But tablespoons which hold an ounce, and wine-glasses which hold more than three ounces, can hardly be said to fulfill either of these necessary requirements."

In the British Medical Journal Dr. William Frazer, of Dublin, says: "I invariably order, with all important medicines, an empty phial to be sent to contain the exact dose required. As a rule, a half-ounce phial is most convenient, for it indicates the medical tablespoon; a two-drachm phial answers for the dessertspoon; and the ounce phial, of course, speaks for itself. I have found no cause for complaint about doses since adopting this simple plan, one of the principal recommendations of it, next to its accuracy, being its extreme cheapness."—*From the Maryland Medical Monthly.*